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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,768	09/15/2003	Ramji Srinivasan	005242.000120	7275

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BANNER & WITCOFF
1001 G STREET N W
SUITE 1100
WASHINGTON, DC 20001

EXAMINER

PEZZUTO, HELEN LEE

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 07/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/661,768

Applicant(s)

SRINIVASAN ET AL.

Examiner

Helen L. Pezzuto

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 20-29 and 32-35 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 and 20-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-29 and 32-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-12, 20-29, 32-35 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/14/06 has been entered.

Election/Restrictions

2. Claims 1-12, 20-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 5/13/06.

Response to Amendment

Applicant's amendment to claims 27, 35 and the cancellation of claims 30-31 filed in the response on 6/14/06 is acknowledged. Currently claims 27-29, and 32-35 are under consideration in this application.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 27-29, 32, and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Pourahmady et al. (US-658).

US 5,498,658 to Pourahmady et al. discloses a latex composition with utility as binder. Prior art latex is a interpolymer derived from 40-30 wt% of at least one functional monomer, 4-40 wt% of an unsaturated dicarboxylic acid monomer, 1-60 wt% of (meth)acrylonitrile, and up to 80 wt% of one or more hydrophobic monomer 9col. 2, lines 29 to col. 3, line 51). Prior art exemplified equal parts of itaconic acid and hydroxypropyl acrylate (or hydroxyethyl acrylate), styrene, n-butyl acrylate, ethyl acrylate, and 3-mercaptopropionic acid within the scope of the instant claims (col. 6-7, Examples 2 and 3, Tables 2 and 3, other working examples). Thus, anticipating the present claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pourahmady et al. (US-658) for the reasons set forth above and further in view of the following remarks.

Prior art latex is a self-curing /self-crosslink product because of the presence of the functional groups in the respective monomers (i.e. the nucleophilic group and the dicarboxylic acid moieties). While the reference does not expressly exemplify the inclusion of an external crosslinking agent, it does, however, disclose the inclusion of conventional additives such as curing agents in the latex composition (col. 4, line 65 to col. 5, line 5). Accordingly, it would have been obvious to one skill in the art to incorporate an external crosslinker/curing agent, motivated by the reasonable expectation of success.

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7. Claims 27-29, and 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reck et al. (US-464) for the reasons of record.

US 6,114,464 to Reck et al. discloses an aqueous formaldehyde-free binder composition, comprising an amine compound (1) and an addition polymer (2). Prior art addition polymer (2) comprises 5-100 wt% of recurring units derived from at least one monoethylenically or diethylenically unsaturated acid monomer (col. 14, line 61 to col. 15, line 18), and up to 95 wt% of at least one further co-monomer (col. 15, lines 19-23). Suitable comonomers are taught within the scope of anionic, cationic and hydrophobic monomers (col. 15, line 24 to col. 16, line 36). Hydroxyalkyl (meth)acrylates, vinyl acetate, and other hydroxyl group-containing monomers, which fall within the scope of the instant unsaturated hydroxyl monomers are taught to be the preferred comonomer by patentees (col. 15, line 58 to col. 16, line 3; lines 30-34). Aqueous free-radical solution polymerization process is expressly taught, and chain transfer agent is further suggested (col. 16, lines 37-65; col. 17, lines 43-55). Crosslinking agents are disclosed (col. 17, line 56 to col. 18, line 7). Prior art binder composition has utility in producing articles

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from fibrous material, including inorganic and mineral fibers (i.e. glass fibers) (col. 23, lines 1-16). Prior art discussed contain aqueous binder composition, comprising the instant adduct within the scope of addition polymer (2), having utility in making glass fiber products as presently claimed. Accordingly, it would have been obvious to one skilled in the art to select the ethylenically unsaturated acid monomer and comonomers suggested and copolymerize them in aqueous solution as taught to formulate the addition polymer (2), motivated by the reasonable expectation of success in producing glass fiber products. Thus, rendering obvious the present claims.

Response to Arguments

Applicant's arguments filed 6/14/06 have been fully considered but they are not found to be persuasive. Irrespective of the presence of hydroxyl amine component (1), the instant adduct still fall within the scope of prior art polymer (2). The polymer(2) was taught to contain as little as 5 wt% dicarboxylic acid monomer and as high as 95 wt% of hydroxyl comonomer, and thus, would expect to meet the instant adduct COOH:OH ratio, absent showing of criticality and/or unexpected results demonstrated for the recited range of the ratio. The examiner remains of the position that any ratio within prior art 5-100

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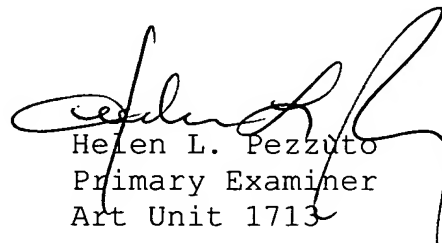
wt% dicarboxylic acid and up to 95 wt% of hydroxyl group containing comonomer would reasonably expected to be functional/operational in the context of binder composition as taught. Furthermore, the present claims do not specifically exclude prior art amine component (1). Accordingly, the examiner's position is maintained.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen L. Pezzuto whose telephone number is (571) 272-1108. The examiner can normally be reached on 8 AM to 4 PM, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Helen L. Pezzuto
Primary Examiner
Art Unit 1713

hlp